

Serial No.: 09/917,649

PATENT APPLICATION
Docket No.: NC 79,856

AMENDMENTS TO THE DRAWINGS

The attached sheets of drawings are corrected drawings for all Figures (1-10). No substantive amendments have been made.

Attachment: 6 replacement sheets

Serial No.: 09/917,649

PATENT APPLICATION
Docket No.: NC 79,856

REMARKS

Claims 29, 47-61, and 63-73 are pending in the application. Claims 48-55, 58-60, 63, and 68-73 are withdrawn pursuant to restriction and election of species requirements. Claim 62 has been canceled by this amendment without prejudice. No claims are presently allowed. There are no prior art rejections against claims 64-67.

Claim 29 has been amended to incorporate the limitation from canceled claim 62 in place of the limitation regarding the conditions of activating the negative pressure source and unsealing the vents.

Claim 29 has been amended to add the missing word "source."

Claim 64 has been amended to cancel the final limitation.

Claim Rejections – 35 U.S.C. § 112

Claims 29, 47, 56, 57, 61, and 64-67 have been rejected under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the written description requirement. The Examiner objected to the limitation "only when at least the negative pressure source is activated and when the respective reservoir is unsealed..." This limitation in independent claim 29 has been replaced with the limitation from canceled claim 62 (dependent on claim 29), and has been canceled from claim 64.

Claims 29, 47, 56, 57, 61, and 64-67 have been rejected under 35 U.S.C. § 112, second paragraph as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Examiner objected to the phrase "at least the negative pressure source is activated" in independent claims 29 and 64. This phrase has been canceled.

Claim Rejections – 35 U.S.C. § 102

Claims 29, 47, and 61 been rejected under 35 U.S.C § 102(e) as allegedly anticipated by Kluttz et al. (US 2002/0127708). Applicant respectfully traverses the rejection.

1. Kluttz does not teach or suggest the presently claimed invention

The Office characterizes Kluttz as providing in Fig. 46 elements 134 as being enclosed first and second reservoirs, adjustable vents EV2, a "T" shaped element located between

Serial No.: 09/917,649

PATENT APPLICATION

Docket No.: NC 79,856

elements 708 and 710 as being the primary channel, and vacuum pump 704 as being the negative pressure source. (Office Action, pg. 7.) While Applicant does not necessarily agree with this characterization, this characterization and the disclosure of Kluttz still do not show the presently claimed invention to be anticipated or rendered obvious by Kluttz, even in view of the cited secondary reference.

For example, the Office has not shown that Kluttz teaches or suggests, either explicitly or inherently, that the fluid does not flow from Kluttz elements 134 the into the "T" element unless both the negative pressure source is activated and at least one of the reservoirs is unsealed, as set forth in, for example, present claim 29. Indeed, to the extent that the disclosure of Kluttz can be understood, it provides that air will flow from vacuum housings 134 though element 708 when valve EV1 (not EV2) is open. (Kluttz ¶155 ("When the valve EV1 is open, the air in the vacuum housing [134] flows to the vacuum tanks 202 through the flow reducer 708.")). The activation of this air flow is disclosed according to Kluttz without regard to the position of EV2 or activation of vacuum pump 704. Further, Kluttz provides, contrary to the Office's apparent position, that valve EV2 controls the flow of air from the atmosphere into the vacuum housing 134; EV2 does not control the flow of air into "T" junction. (Kluttz ¶157 ("When the electrovalve EV2 is open, the ambient air flows to the vacuum housing [134]....").)

2. Kluttz is not prior art

All the claims of Kluttz recite a temperature control system. Such a system is not recited in any pending claim. Kluttz is a patent application publication not claiming the same invention and may be disqualified by a declaration showing prior invention. Accordingly, without conceding the rejection, Applicant further presents the attached Declaration under 37 C.F.R. § 1.131 of Mark J. Feldstein, which incorporates portions of an invention disclosure that formed the basis of the present application. "Page 3 of 7" shows figures including the primary fluid channel, negative pressure source, and reservoirs as recited in claim 29. Low Reynolds number fluids are described on "Page 7 of 7."

As stated in the Declaration, the work described in the disclosure was completed by 05/03/1999. Kluttz is a divisional application claiming priority to a parent application with a filing date of 10/18/1999, which is after the date established by the Declaration. The parent application claims priority to earlier applications, however, the parent is a continuation-in-part application. The earlier applications do not disclose the figure in Kluttz (Fig. 46) cited by the

Serial No.: 09/917,649

PATENT APPLICATION

Docket No.: NC 79,856

Examiner. Kluttz is disqualified as prior art, obviating this rejection.

Claim Rejections – 35 U.S.C. § 103

Claims 56 and 57 have been rejected under 35 U.S.C § 103(a) as being allegedly unpatentable over Kluttz in view of Pilevar et al. (US 6,558,958).

As explained above, Kluttz does not teach or suggest all the elements of claim 29, from which claims 56 and 57 depend. Pilevar as not been cited for, and does not overcome these deficiencies. Furthermore, the Office has only contended that the alleged combination of Kluttz in view of Pilevar would have been obvious “in order to detect hybridization as taught by Pilevar.” (Office Action, pg. 5.) The Office has not identified any teaching or suggestion in the record for the alleged combination, any motivation in the record for the alleged combination, or a basis in the record that there would have been a reasonable expectation of success for the combination. Accordingly, the Office has not set forth even a prima facie case. Finally, as also noted above, Kluttz is disqualified as prior art, thereby obviating this rejection.

CONCLUSION

In view of the foregoing, it is submitted that the application is now in condition for allowance.

In the event that a fee is required, please charge the fee to Deposit Account No. 50-0281, and in the event that there is a credit due, please credit Deposit Account No. 50-0281.

Respectfully submitted,



Joseph T. Grunkemeyer
Reg. No. 46,746
Phone No. 202-404-1556
Office of the Associate Counsel
(Patents), Code 1008.2
Naval Research Laboratory
4555 Overlook Ave, SW
Washington, DC 20375-5325